SMP7CTX220 Series Power Supply/Charger

Overview:

SMP7CTX220 series convert a 220VAC 50/60Hz input into a regulated 12VDC or 24VDC output up to 6 amp of continuous load current (see specifications).

SMP7CTX220 Series Power Supply Configuration Reference Chart:

Altronix Model Number	Accessory Power Distribution Module(s)	Number of Output(s)	Fused Outputs	PTC Outputs	Output Rating (amp)	220VAC 50/60Hz Input Current (amp)	12/24VDC Total Output Current (amp)	Supervision	Enclosure Dimensions
SMP7CTX220	–	1	–	–	–	0.8	6	–	13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.55mm)
SMP7PMCTX220	–	1	–	–	–			✓	
SMP7PMP4220	PD4	4	✓	–	3.5			✓	
SMP7PMP4CB220	PD4CB	4	–	✓	2.5			✓	
SMP7PMP8220	PD8	8	✓	–	3.5			✓	
SMP7PMP8CB220	PD8CB	8	–	✓	2.5			✓	
SMP7PMP16220	PD16W	16	✓	–	3.5			✓	
SMP7PMP16CB220	PD16WCB	16	–	✓	2.5			✓	

Specifications:

Input:

- Input 220VAC, 50/60Hz, 0.8 amp.

Output:

- 12VDC or 24VDC selectable output.
- 6 amp supply current.
- Filtered and electronically regulated outputs.
- Short circuit and thermal overload protection.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current 0.7 amp.
- Zero voltage drop when switching over to battery backup.

Visual Indicators:

- AC input and DC output LED indicators.

Features:

- Power on-off switch.
- Complete with power supply, power distribution module (when applicable), enclosure, cam lock & battery leads.

Enclosure Dimensions *(H x W x D approx.)*:

13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.55mm)
- Accommodates up to two (2)12VDC/7AH batteries.

Power Supply Voltage Output Specifications:*

Output VDC	Switch Position	Max. Load DC
12VDC	SW1 - Closed *(Fig. 4b, pg. 3)*	6 amp
24VDC	SW1 - Open *(Fig. 4b, pg. 3)*	6 amp

*Specified at 25˚ C ambient.

Installation Instructions:

The unit should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount unit in the desired location.
2. Set SW1 on the power supply board to the desired DC output voltage *(Power Supply Voltage Output Specification Chart)*.
3. Connect AC power to terminals marked [L & N], connect ground to terminal marked [G] (if used) *(Fig. 4, pg. 3)*.
4. Measure output voltage before connecting devices. This helps avoiding potential damage.
5. Connect devices to be powered:
   a. For Power Supply Board, connect to terminals marked [– DC +].
   b. For Power Distribution Module(s), connect devices to be powered to the terminal pairs 1 to 4 marked [1P & 1N] through [4P & 4N] *(Fig. 2, pg. 2)* on PD4/CB board, terminal pairs 1 to 8 marked [1P & 1N] through [8P & 8N] on PD8/CB *(Fig. 3, pg. 2)* or terminal pairs 1 to 16 marked [1P & 1N] through [16P & 16N] on PD16W/CB *(Fig. 4, pg. 3),* carefully observing correct polarity.

***Note:** Power switch is used to disconnect the L (HOT) terminal from the rest of the board. When servicing the unit, AC mains should be removed.

CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.

6. When using stand-by batteries, they must be lead acid or gel type. Connect battery to the terminals marked [– BAT +] (battery leads included). Use two (2) 12VDC batteries connected in series for 24VDC operation *(Fig. 4, pg. 3)*. Note: When batteries are not used, a loss of AC will result in the loss of output voltage.
7. Connect appropriate signaling notification devices to AC Fail & Low Bat supervisory relay outputs marked [NC, C, NO] (supervised models only) *(Fig. 4a, pg. 3)*.

LED Diagnostics:

Power Supply Board

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC. Stand-by battery supplying power.
OFF	ON	No DC output.
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output.

Power Distribution Module

Green	Power Distribution Module Status.
ON	Normal operating condition.

Terminal Identification:

Power Supply Board

Terminal Legend	Function/Description
L, G, N	Connect 220VAC to these terminals: L to Hot, N to Neutral, G to ground (if used).
– DC +	12VDC / 24VDC @ 6 amp continuous output.
AC FAIL NC, C, NO	Used to notify loss of AC power, e.g. connect to audible device or alarm panel. Relay normally energized when AC power is present. Contact rating 1 amp @ 120VAC / 28VDC.
Low Battery NC, C, NO	Used to indicate low battery condition, e.g. connect to alarm panel. Relay normally energized when DC power is present. Contact rating 1 amp @ 120VAC / 28VDC. Low battery threshold: 12VDC output threshold set @ approximately 10.5VDC, 24VDC output threshold set @ approximately 21VDC.
– BAT +	Stand-by battery connections. Maximum charge rate 0.7 amp.

Power Distribution Module

Terminal Legend			Function/Description
PD4/PD4CB	PD8/PD8CB	PD16W/PD16WCB	
1P to 4P	1P to 8P	1P to 16P	Positive DC power outputs
1N to 4N	1N to 8N	1N to 16N	Negative DC power outputs

Power Distribution Module(s):

Fig. 1

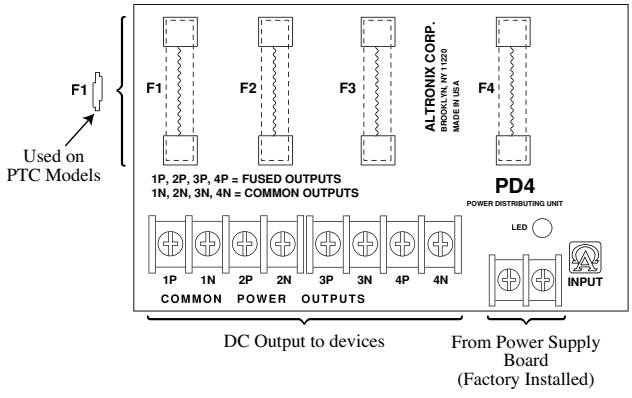
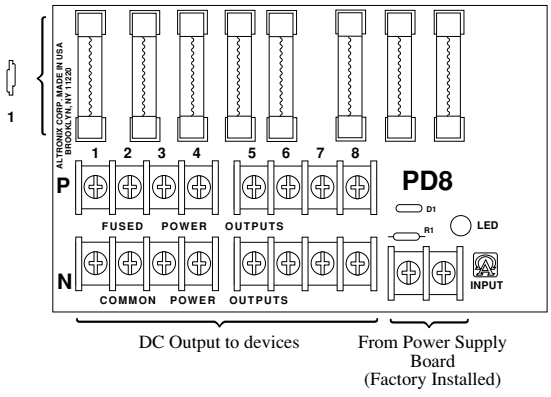


Fig. 2



Power Distribution Module(s):

Fig. 3

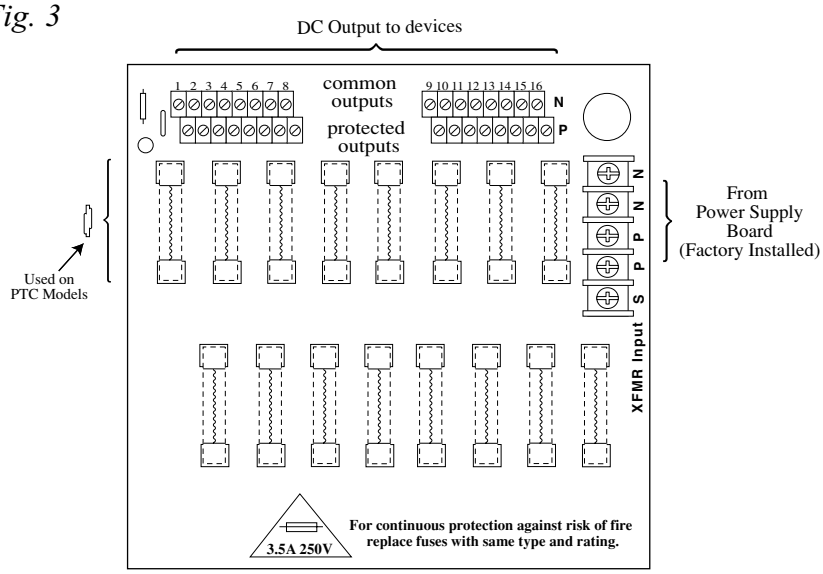


Fig. 4

CAUTION: De-energize unit prior to servicing. For continued protection against fire hazard replace fuse with the same type and rating.

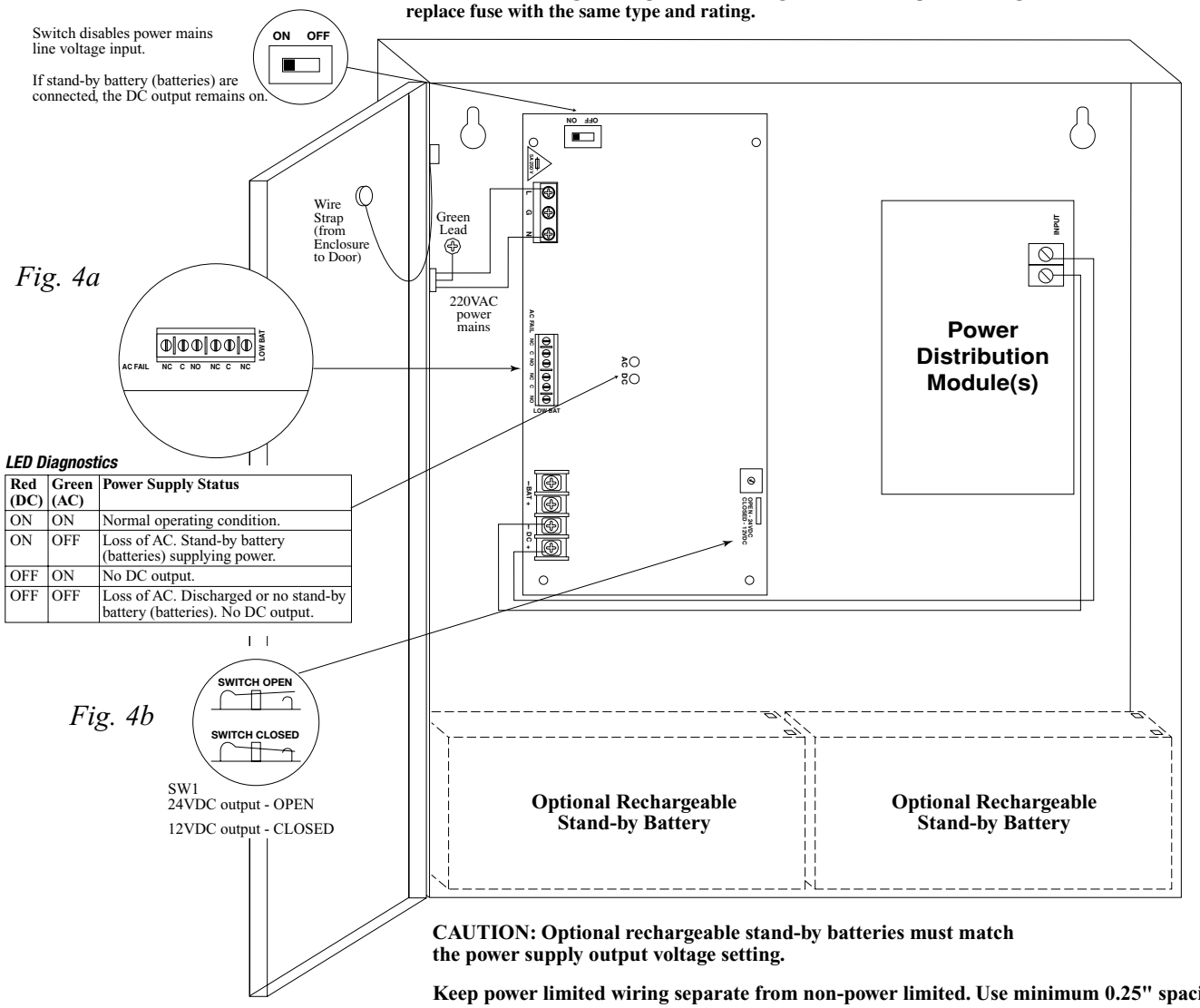


Fig. 4a

LED Diagnostics

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC. Stand-by battery (batteries) supplying power.
OFF	ON	No DC output.
OFF	OFF	Loss of AC. Discharged or no stand-by battery (batteries). No DC output.

Fig. 4b

SW1
24VDC output - OPEN
12VDC output - CLOSED

CAUTION: Optional rechargeable stand-by batteries must match the power supply output voltage setting.

Keep power limited wiring separate from non-power limited. Use minimum 0.25" spacing.

Enclosure Dimensions *(H x W x D approximate)*:

13.5” x 13” x 3.25” (342.9mm x 330.2mm x 82.55mm)